is followed by severe symptoms after the second. This curious feature is analogous to the hypersensitiveness which sometimes develops during diphtheria and tetanus immunization and, indeed, may occur upon the administration of various sera. In Roth-Schulz's series of cases there is no relation between the sex, age, or general condition of the patient and the degree of reaction to the drug. The male patients react as a rule to smaller doses than the female but no factor is discovered to explain this. The duration of a lesion and its acuteness apparently bear no relation to the intensity of the reaction. The slight, closed, early cases seem to react more readily than others. As to the specificity of the reaction, we must depend chiefly upon the reports of veterinarians, and these are now almost unanimously agreed that when a definite reaction occurs tuberculosis must be present. The more carefully autopsies are performed the lower the percentage appears of reactions without demonstrable tuberculous lesions. The frequent occurrence of marked reactions in apparently normal adults and the absence of tuberculin sensitiveness in the newly born corresponds, too, very closely with our knowledge of the occurrence of tuberculosis in man. The fact that so many apparently normal adults do react positively to tuberculin is the one objection to be raised to its use as a diagnostic agent. It would be foolish to employ it indiscriminately and treat, in a sanatorium, everyone who reacts. It is merely a link in our chain of evidence and the careful consideration of the accompanying symptoms, which render the patient a suspect, are of the greatest importance for diagnosis. Marked reactions to small doses are very suggestive of an active lesion.

Clinical Contribution to the Etiology and Pathogenesis of Hepatic Cirrhosis.—JAGIE (*Wien. klin. Woch.*, 1906, xix, 1058) reports a number of cases of cirrhosis of the liver which have been carefully observed during the past few years in the late Dr. Nothnagel's clinic. He points out the unsatisfactory classifications at present obtaining and insists upon the importance of discovering if possible the underlying cause of the condition. The anatomical classification, for instance, is a very unsatisfactory one, as alcohol, among other poisons, may cause two distinct types of the disease. In his first group of cases, numbering seventeen, the clinical picture is fairly uniform. All of them are marked alcoholics, and the initial symptoms of the disease those of alcoholic gastritis and enteritis. Jaundice occurs early in all, and is of a various and varying degree. One special symptom upon which Jagie lays great stress is the occurrence of attacks of pain in the hepatic area with tenderness over the liver. This he considers an important diagnostic feature. According to Naunyn, the attacks of pain and the jaundice are referable to an associated cholangitis. With every cirrhosis there is a certain degree of obstruction to the flow of bile, and this stasis must favor bacterial infection. Jagić points out that conversely infection from the catarrhal intestines may play an important etiological role in these cases. In the second group, numbering five cases, the importance of a chronic tuberculous lesion, as a causative factor, is strongly emphasized. A history of excessive alcoholic indulgence is absent; but all give a definite history of symptoms produced by tuberculosis, arrested apical lesions, pleurisy, protracted and severe bronchitis. The autopsy in all five cases, too, showed old pulmonary, glandular, or bone tuberculosis which had, in all probability, antedated the cirrhosis. The clinical picture is quite different from the alcoholic cases. The attacks of hepatic pain and the jaundice are absent. Indeed, the symptoms of any liver derangement are so slight as scarcely to draw attention to the organ. The importance of tuberculosis as an etiological factor in cirrhosis of the liver is further emphasized by certain animal experiments. Bensancon and Griffin, by the injection of pus from cold abscess, and Bartel by the injection of tubercle bacilli of low virulence, have observed in guinea-pigs, changes in the liver identical with cirrhosis as it occurs in man. Other authors have obtained similar results. Hansemann describes a form of spontaneous tuberculosis in guinea-pigs regularly associated with cirrhosis of the liver and often accompanied by attacks of jaundice.

Mechanism of Compensation in Tricuspid Insufficiency.—FRANKE (*Wien. klin. Woch.*, 1906, xix, 956). Many clinicians, considering the anatomical arrangement of the circulation, have contended that no satisfactory compensation of a tricuspid lesion can be established, as there is no driving force back of the lesion except the inefficient right auricle. As is shown clinically and experimentally, the left ventricle cannot overcome the deficiency as the right does in mitral lesions; in animals, after artificial damage to the tricuspid valves, the left ventricle is normal or a little atrophied. Franke cites cases to show that a certain degree of compensation does occur, that patients with serious tricuspid lesions may live comfortably for considerable periods of time, and that even after compensation has been broken, it may be satisfactorily re-established. He considers three factors as important in maintaining it. Hypertrophy of the right ventricle keeps up pressure in the pulmonary circulation and this pressure may be above normal, as is evidenced by the much accentuated second pulmonic sound. During diastole it exerts a suction action which assists the flow of blood from the auricle and veins. The elasticity and passive resistance of the auricle and large venous radicals prevent, to a certain degree, regurgitation. The contractile force of the hypertrophied right auricle, Franke thinks, is of small moment, as the presystolic wave formed in venous pulse tracings by its contraction is scarcely visible and certainly not accentuated above the normal. A very important feature, however, and a rather ingenious assumption is the position he gives the peripheral vessels in maintaining compensation. Hasebrock has drawn attention to what he terms the systole and the diastole of the peripheral vessels, and has pointed out its importance in sustaining the general circulation. Franke likens this action, which he thinks is accentuated by the passive congestion of tricuspid insufficiency, to the role the right ventricle plays in mitral lesions. This contractile power in the peripheral vessels, he believes, is most evident in the liver. The systolic regurgitant wave beating back into the veins finds its freest path along the hepatic vein, which is without valves. The greatest damming back, then, must occur in the liver, which is the meeting point of two venous waves coming in opposite directions; one the hepatic, the other the portal system. The pressure in the portal vein measures only from 7 to 13 mm. of mercury, while that in the hepatic, with an actively working hypertrophied right ventricle,